

A DESCRIPTIVE STUDY
OF TEACHER ATTITUDE
TOWARD PORTFOLIO USE
IN THE ELEMENTARY CLASSROOM

MASTER'S PROJECT

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by

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CHAPTER I

INTRODUCTION

Purpose for the Study

Within the context of contemporary education alternative methods of assessment have been suggested as replacements for conventional testing(Routman, 1991; Tierney, Carter, Desai 1991; Osteen, 1994; Bergeron, 1994; Adams and Drobnak, 1991; Johnston, 1992; Farr, 1992). Proponents of alternative methods of assessment argue that conventional methods do not match current instructional practice.

Traditional forms of testing have been criticized for being too limited in focus because it is a spewing back of material presented by the teacher rather than a representation of the student's understanding of the material. This method of assessment represents an outdated, restricted view of learning in which a good test grade is the ultimate goal. Conventional testing is entirely teacher controlled (Tierney, Carter, Desai, 1991) which does not allow the student the opportunity for self-evaluation or individual goal-setting. Adams (1991) stated that traditional testing does not create growth but rather stifles creativity and causes negative self-images.

Current educational philosophy espouses a more holistic approach toward evaluating the student and calls for less testing and more holistic assessment instruments. These instruments should be linked more closely to an evaluation of the student as a whole, based not on his/her performance alone but on progress and effort as well.

One alternative assessment strategy which is currently being discussed and researched is portfolio use (Routman, 1991; Tierney, Carter, Desai, 1991; Farr, 1992). Once thought of as only a whole-language tool portfolios are now being considered for broader use within language arts programs. Despite this trend, however, teachers have voiced their misgivings during discussions regarding portfolio implementation such as what the function of a portfolio is, what type of work samples should be included in a portfolio, and how a portfolio can be used effectively as an assessment tool (Routman, 1991; Hansen, 1994; Adams and Drobnak, 1994; Howard, 1994).

The newly revised course of study for the Diocese of Columbus (1995) mandates the implementation and use of portfolios within the language arts curriculum with the start of the 1995-1996 school year. Diocesan teachers in this research study teach in one of those schools. They have had little preparation and training in portfolio design and use other than reading about

the process in professional journals, and are, therefore, hesitant to implement portfolio use in their classrooms. This research examines whether there will be an attitude change in those teachers once they have implemented portfolios and have addressed their concerns.

Statement of the Problem

The purpose of this research study was to evaluate elementary school teachers' attitudes toward portfolio use in the classroom before and after their implementation with students.

Hypothesis

There will be no significant difference in the mean pretest and posttest attitude scores of elementary teachers toward portfolio use before and after implementation of a portfolio with each student.

Assumptions

Underlying the study is an assumption that teachers will answer the questions truthfully and thoughtfully. A semantic differential will be used to test elementary teacher attitude toward the use of portfolios in the classroom. Teachers will be given the semantic differential before and after initiation of portfolio use.

A second assumption is that teachers will initiate the use of a portfolio for each student during the current school year, 1994-1995.

Third, the researcher assumes that the instruments measures teachers' attitude toward portfolio use. A field test will be conducted to establish content validity.

Limitations

There are several limitations to this study. The first one is the small number of respondents (n=15). Second is that some teachers may consider portfolio use only applicable to the language arts and, therefore, not germane to their subject area so they may not initiate portfolio use. Also the limited time of the study, three months, may taint the results as there may not be enough time to create an attitude change. Finally, even the most well-intentioned teacher may have time constraints on the ability to maintain portfolios for all students throughout the school year.

Definition of Terms

A portofolio is an on-going collection of student work representative of all subject areas that serves as a basis for on-going evaluation (Routman, 1991; Schurr, 1992).

Attitude is the positive or negative response toward the topic.

Classroom teacher is an individual who is certified by the State of Ohio and is employed to teach full-time in a state certified elementary school.

Language arts includes organized time blocks consisting of spelling, reading, creative writing, and English grammar.

Chapter II

REVIEW OF THE LITERATURE

Advantages of Portfolio Use

The need for better assessment instruments which are more closely linked to student performance has been discussed by educators for the past several years as the movement in education has gone from the traditional to a more holistic philosophy of education.

Portfolios, as assessment tools, have advantages over conventional tests because they can address the real achievements of the student as readers, writers, and problem-solvers. As stated by Bergeron (1994) "unlike standardized test scores which are limited in focus, portfolios provide tangible evidence of progress".

Schurr (1992) reinforced that idea when she stated that "the portfolio provides a vehicle for demonstrating changes in the student's attitude, academic performance, and interest areas". The use of the portfolio as an assessment tool is a reflection of the belief that writing instruction for communication is more important than spelling and grammar.

The seminal research conducted by Tierney, Carter, and Desai (1991) demonstrated the need for the portfolio as a method of authentic assessment. They

felt that portfolios represented a wide range of reading and writing activities in which the students were engaged. They stated that the portfolio is "able to address improvement, effort, and achievement while standardized tests address only achievement." The on-going process of assessment with a portfolio represents the philosophy that "teaching and assessment are closely related and that the most powerful assessment is done by the teacher in the classroom on a daily basis" (Tierney, Carter, Desai 1991).

An advantage of portfolio use is that problem solving, communication, self-evaluation, and goal-setting are built into the process of portfolio use. Adams and Drobnak (1994) stated "portfolios offer students and teachers a way to take charge of their teaching and learning." The teacher and student together discuss and decide upon information to be included in the portfolio. This encourages students to reflect upon what is important to them. As Bergeron (1994) has suggested, students must justify their choices of work to be included in their portfolio which encourages them to make decisions and improve their communication skills. As students evaluate current work and up-date their portfolios, they are provided with a means for evaluating the current work in relation to past. This enables them to see progress

which has been made as well as to identify areas which require improvement. This evaluation process helps the student to set goals for himself as writing becomes a developmental process (Adams, 1991; Bergeron, 1994; Howard 1994).

Another advantage of portfolios according to Tierney, Carter, and Desai (1991) is that because of the process of self-evaluation and decision making in terms of what is to be included in the portfolio, students experience more of a sense of ownership toward their work. This sense of ownership together with the process of self-evaluation and goal setting helps the student become more responsible for his own learning.

Portfolio use is advantageous in that by its very nature portfolios increase the teacher's awareness of each student. Analyzing portfolios requires looking at all facets of student work such as versatility, effort, achievement, and growth. Built into the self-evaluation process is teacher interaction with each student on an on-going basis in the form of student-teacher conferences. As Tierney, Carter, and Desai (1991) stated "there is a collaborative effort between teacher and student over time". Herman (1994) reinforced this idea when he stated that "portfolios encourage each teacher to focus on each child each week throughout the year". The advantage of this

conferencing is that the teacher has a broad picture of each student drawn by viewing and discussing different types of work over a long period of time. With portfolios as an assesment tool the child is never lost and is continually a focus of the teacher's attention.

Portfolio use is advocated as a way to increase parental involvement in the child's learning and as an aid to parent-teacher conferences. With the use of portfolios fewer work samples are sent home because of the time the writing process takes. Therefore, parents should be informed that portfolios are being used as the assessment tool for their child. Bergeron (1994) stated that once parents become aware that portfolios are being used and how they are used, they "gain an understanding of the child's growth and development by observing work samples over time". This enables the parent to obtain a clearer picture of the child's strengths and weaknesses and empowers them to have definite, realistic goals toward which they can guide their child.

Portfolios are advantageous for use in parent-teacher conferences because they provide concrete evidence of the child's progress. By having work samples representative of different time periods, development and change can be clearly observed and then discussed. This too encourages realistic goal-setting

in a spirit of cooperation between the teacher and parent.

Although the research delineates many reasons for using portfolios as authentic assessment tools, there are also disadvantages. The teacher's choice as to whether or not to use them may depend on her commitment to a holistic philosophy of education and a readiness to accept new methods of teaching even though there are some difficulties.

Disadvantages of Portfolios

There are some disadvantages which have been voiced regarding portfolio use. Routman (1991) stated that there is a danger of "portfolios becoming storage bins containing data with no useful purpose" and that they "over-emphasize the idea of collection".

Routman was also concerned that portfolios may not be truly representative of the student's effort and academic growth if only the student's best work samples are chosen for inclusion. Routman argued that there is a definite need for some type of assessment criteria to be established to insure true representation of the student's achievement and progress. Bergeron (1994) agreed emphasizing that a system of organizing and collecting a variety of work samples that needs to be developed for portfolio assessment to be valid.

Another concern regarding portfolio use voiced by Routman (1991) is that portfolio assessment may be too time-consuming for the teacher to implement. Johnston (1992) agreed that the "stress of time and need for accountability will reduce the portfolio to a checklist of material left out". Adams (1991) reinforced this concern when he stated that portfolios are "more time consuming and difficult to norm than their standardized counterparts". Teachers need to be willing to refocus their time and adjust their priorities to develop a schedule or time-frame in which they can manage to conference with the student and allow for periodic review of the portfolio.

A major concern in the implementation of a portfolio as an assessment tool in the classroom is that by virtue of its design, it requires that the teacher give up classroom control. With a portfolio philosophy toward education the student ultimately takes control of his learning. It is the student who decides which work samples are to be included in the portfolio; it is the student who self-evaluates his work; it is the student who sets goals for himself; it is the student who is responsible and accountable for his learning. As Routman (1991) stated this is a difficult philosophy for many teachers to embrace as they are used to being in control, making the

decisions, and running their classrooms and they are not willing to entrust that responsibility to their students.

Another of Routman's concerns regarding use of portfolios as an assessment tool was the lack of training available to teachers prior to implementing portfolios as a method of assessment. She voiced concerns that there are no established criteria for determining what is to be included in a portfolio or how it is to be graded. Tierney, Carter, and Desai (1991) responded to this by stating that in portfolio assessment there is a need to move beyond looking at a single grade to looking at "where a child came from and what his goals, effort, and improvement are". They suggested a rubric to provide meaningful, consistent results.

The lack of training available to teachers regarding the implementation of portfolios in the classroom has become more apparent as school districts have begun to mandate portfolio use. Tierney, Carter, and Desai (1991) and Clemmons, Laase, Cooper, Areglado, and Dill (1993), have recognized the problem and have written how-to manuals for classroom teachers in an effort to help fill the training need. Adams and Drobnak (1994) reaffirmed the need for better teacher training with studies that pointed out that problems

have occurred when portfolios were used as assessment tools, not because of the portfolio concept, but because teachers did not know what they were expected to do nor how to do it. For this reason, they too advocate programs of in-service training in the use of portfolios as assessment tools.

If the disadvantages of using portfolios as assessment tools can be overcome, and the teacher is committed to the portfolio as a method of authentic assessment, before they can be implemented in the classroom thought and consideration must be given to their design and purpose.

Design and Purpose of the Portfolio

The design and purpose for the portfolio must be determined by each teacher before portfolio use is implemented in the classroom. This is necessary to provide organization of materials as well as to maximize the portfolio for use as an assessment tool.

The first decision which should be made is to determine what type of structure will be used to store materials. There are several different options to choose from depending upon the function of the portfolio. Graves and Sunstein (1992) divided portfolio cases into five categories: "handmade non-functional, handmade functional, loose-leaf notebook, trapper keeper, and photo album". The

non-functional proved the least workable because each entry had to be permanently mounted on construction paper and was a permanent addition to the portfolio. This method was in direct opposition to the idea of on-going assessment and change.

The handmade portfolios were functional and had pockets into which material could be added but because they were usually made of construction paper, they were not durable.

Because of the design of the trapper keeper, these proved to be a more workable container. One side could be used for reading and learning logs, while the other pockets could be used for writing or other work samples. It was also easy to slide new papers in or take out work which was no longer needed.

Graves and Sunstein (1992) preferred loose-leaf notebooks because it was easy to flip back and forth between work samples and sections. Adding and deleting material was also easy because any work sample could be added just by using a three-hole punch.

They felt photo albums were also a good choice because work could easily be added or deleted simply by peeling back the plastic covers on the pages. Because of their durability they were a good conduit for displaying students work over time.

McKnight (1994) used expandable folders in which students could place anything from writing samples to "curling irons" These were successful because of their ability to store many different shapes of materials and because of their durability.

The main consideration in choosing what type of case to use seemed to be not so much what kind it was, but how functional it was. Perhaps more important than the type of container used is the decision as to what type of material is to be included in a portfolio and who makes that decision. Adams (1991) stated that "there is no right way to design a portfolio, but that the purpose should determine the design".

If the purpose of the portfolio is to bring together "representative work samples over time" (Adams, 1991); then the teacher and student might work together to choose a variety of work samples such as: journal entries, art samples, writing samples, learning logs, and reading response logs done at different times throughout the school year. The role of the teacher would be that of guide or facilitator to help the student learn how to reflect upon and self-evaluate his own work and to set goals for himself.

If the purpose of the portfolio is to show growth and progress, then rough drafts and baseline samples as

well as finished work should be included in the portfolio. Samples of the student's worst writing, his best writing, something he found difficult, and a final piece showing how he reached a peak are all effective ways to show growth. This too should be a collaboration between teacher and student.

The portfolio can also be used as an evaluative tool for job interviews or college acceptance. In that circumstance samples of the student's very best work applicable to the specific situation would be included in the portfolio (Adams, 1991).

Portfolios might have as a purpose describing the student as "a person, writer, or reader" (McKnight, 1994). McKnight allowed students to put anything they wanted in their portfolios from an A paper to Barbie dolls and curling irons. His only stipulation was that each entry be accompanied by a detailed written statement explaining why that item had been chosen. The portfolios McKnight used in his classroom were entirely student controlled with no input nor question of contents by the teacher.

Farnan and Fearn (1994) discussed the writer-owner writing portfolio in which the portfolio fulfills the writer's need to "compile and collect". This portfolio may include half-completed works, ideas, and whatever else may be of value to the writer-owner. It is never

graded nor evaluated by either the owner or teacher. Its purpose is solely storage of ideas.

Bergeron (1991) also suggested that portfolios be designed with a purpose in mind and hers was assessment. As teacher, she chose what was to be included in the portfolio because she considered the portfolio a way for the teacher, as well as the student, to evaluate her performance and teaching strategies. Like McKnight she suggested a justification for what was included but hers was written by the teacher.

Routman (1991) stated that, "The most important aspect in designing a portfolio is that it is an on-going assessment tool". If this is the philosophy of the teacher, then it requires that there be both formal and informal tests and work samples included in the portfolio. It also requires uniform teaching decisions, grading, and accountability if a portfolio is to fit into present day school districts as a legitimate assessment tool. She stated that although she believed that students should share in the decision of what to include in the portfolio that certain required components also should be there.

Routman went on to state that at the present time portfolios tend to "over-emphasize collections of things" but what should be happening instead is

evaluation in its highest sense which is "valuing and analyzing the process, the product, and attitudes about learning". She felt this takes place through the processes of observation, measurement, and anecdotal records. Together these create a student profile detailing students' progress, strengths, and weaknesses. This is of obvious use to the teacher in working with the student but, more importantly, is used by the student on his way to self-evaluation and goal-setting.

Once the purpose of the portfolio has been established and the design has been decided upon, the teacher must make decisions as to how the portfolio will be used as an assessment tool. It must represent not only achievement but effort and progress as well.

Portfolios as Assessment Tools

Tierney, Carter, and Desai (1992) stated "the over-riding goal of the portfolio is to develop self-assessment systems" (1992). If this philosophy is embraced, it requires that, although teachers have a tendency to step in and make decisions regarding what ought to be included in a portfolio, in reality, they need to develop portfolios in partnership with the student. This enables the student to develop his own "self-assessment system".

One of Tierney, Carter, and Desai's (1992) major concerns, not voiced by other experts, was that students not be made so conscious of what they are learning and achieving- that it becomes "harmful to the spontaneous writing experience". In response to this they have recommended many assessment strategies which would not jeopardize either student involvement, enthusiasm, or sense of ownership.

One of the recommendations was that teachers hold monthly portfolio conferences with the student and keep anecdotal records of those conferences. They also suggested that at the end of each grading period the teacher review the portfolio and anecdotal records in depth with the student in three major areas:

- 1) types of reading/writing which has occurred, 2) types of reading, and 3) types of writing (1991).

Tierney, Carter, and Desai (1992) also agreed with Routman that grading portfolios should not be a matter of ABC but should move beyond that to look at "where the child came from, the effort he has put into his work, and the improvement that he has made" (1992).

Shirley (1994) reinforced the ideas of Tierney, Carter, and Desai for authentic assessment and has devised her own strategy called "PLAN" (1994). The first component of her assessment method calls for the creation of the portfolio which is to consist of

stories reflecting various writing skills and drafts, with a rubric used for evaluation. In addition to the portfolio students keep a learning log consisting of specific information they should know pertaining to the unit on which they are working. The third aspect of the PLAN is anecdotal records which Shirley kept regarding drafts, revisions, and presentation of the students' final work samples. The final aspect is necessary skills. This area reflects comments on mastery of specific, required elements for the assignment.

In summary, regardless of whose theory is used, experts in the field have suggested some key elements which must be remembered if portfolios are to be used as authentic assessment tools:

- 1) a portfolio should consist of a variety of work samples representative over time,
- 2) a portfolio should address reading and writing activities and skills,
- 3) portfolio assessment should include both the student and the teacher working together toward the goal of self-evaluation and goal setting,
- 4) portfolio assessment should be based on more than just the final product, it should evaluate effort, process, and progress,

- 5) portfolio assessment should be continuous with and inseparable from instruction and teaching,
- 6) portfolio assessment should strengthen the teacher and student's knowledge of each other and the process,
- 7) there needs to be specific, well-defined evaluation processes to authenticate portfolio assessment within traditional grading programs.

As the research supports, portfolios are an effective, authentic, assessment tool. They provide a means for evaluating progress and process as well as product. They provide a vehicle for both the teacher and the student to become more actively involved in the learning experience.

CHAPTER III

PROCEDURE

Subjects

The subjects of this study were fifteen teachers who were certified for grades kindergarten through eight. The length of their teaching experience varied from one year to twenty-four years. Ages of the teachers ranged from twenty-three years to fifty-two years. One of the subjects had a doctorate in education, four had masters' degrees, and the remainder had bachelor degrees. Two of the respondents were men; the rest were women. All teachers were exposed to the treatment variable (portfolio use).

Setting

School. The school chosen for this study was a small, private, parochial school in the Diocese of Columbus. Grades kindergarten through eight were located in the same building but separated somewhat by building design, much like the letter H. Kindergarten through grade four were in one wing of the building, fifth grade was in a connective hallway, and grades six through eight were in a second wing. There were two classes of each grade with class size ranging from seventeen to twenty-five. Grades kindergarten through three were self-contained classrooms. Students in grades four through eight changed classes and had three

teachers: one for mathematics, one for science and health, and one for language arts. The school was built on a common with a church, library, senior citizen center, tennis courts, pool, playground and public library.

Community. The community where this school was located is an upper-middle to upper class suburban neighborhood. The streets adjacent to the common have single family homes which are well-kept valued at over \$150,000. The majority of people in the community are college-educated, professionals or retirees. Most of the students live in the neighborhood either within walking distance or less than five minutes away by car.

Data Collection

Construction of the Data Collecting Instrument.

The survey instrument was a semantic differential. It was chosen to evaluate teachers' attitudes toward portfolio use. The instrument consisted of written directions which were read aloud to the respondents. Twenty pairs of bipolar adjectives were chosen by the researcher which were intended to elicit evaluative responses (Ary, Jacobs, Razavoeu, 1985; Gay, 1987). There were five spaces between the adjectives so that the respondents could choose the space nearest to the adjective which most closely described their attitude toward portfolio use. Responses closest to 5 were

considered by the researcher to reflect positive attitudes, those closest to 1 were considered to reflect negative attitudes.

The instrument was field tested on a like population prior to its administration to the experimental group.

Administration of the Data Collecting Instrument.

The semantic differential was administered to the total group of respondents during one setting. Directions were read aloud to the group. Only questions pertinent to the response procedure were addressed. Subjects then individually completed the survey. The pretest was given prior to the implementation of portfolios. The posttest was given three months after portfolio use had been established.

Design

The research design was quasi-experimental. This was a classical design with minimal control (Issac, Michael, 1981). A pretest, T_1 was administered to the study group prior to the introduction of the treatment variable. The subjects were then be exposed to the treatment variable (x) which in this case was the institution of a portfolio for each student in the class. After a three month time period during which the teacher implemented portfolio use, the subjects were re-tested T_2 . This determined what difference the

treatment made. Thus, the experimental design became:
 $T_1 \times T_2$.

Treatment

The independent variable was the implementation of portfolios. Each teacher, without any training or guidelines from the researcher, was asked to institute a portfolio for each student in his/her classroom. Portfolio use was not mandated. The function and design of the portfolio was at the discretion of the individual teacher. There were no meetings held on the subject of portfolios nor was there any training provided on portfolio implementation. Individual teacher knowledge of portfolios was an uncontrolled variable as some of the teachers may have done independent reading on the subject unknown to the researcher.

Results of the implementation of the treatment variable, the institution of portfolio use in the classroom, were assessed after a three month period. The results of the findings are discussed in Chapter 4.

CHAPTER IV

RESULTS

Presentation of the Results

In Chapter 4 the results of the study are presented and discussed. As stated in Chapter 3, a semantic differential was administered to fifteen elementary teachers in a suburban parochial school to determine if there was a change in the teachers' attitudes toward portfolios before and after implementing them in the classroom. The identical survey instrument was administered as the pretest and posttest. There was a three month time period between the administration of the tests.

The semantic differential consisted of twenty bipolar adjective pairs with a range of 1 through 5. The researcher determined which adjectives were considered positive and which were considered negative. Responses closest to 5 represented positive responses, whereas responses closest to 1 were interpreted as negative responses. The highest raw score possible for the test was 100 which indicated the maximum positive response to all adjective pairs. A raw score of 20 indicated a totally negative response to all adjective pairs. The researcher set as a standard the midpoint range of 60 to identify responses as positive or negative. Therefore, all scores of 60 and above

indicated a positive attitude toward the study construct, attitude toward portfolio use, and all scores less than 60 indicated a negative attitude. The scoring key used for the semantic differential can be found in Appendix C.

TABLE I
MEASURE OF STANDARD DEVIATION

TEST	N	X	S
pretest	15	69	16.60
posttest	15	67	16.15

$t = -0.32$, $df = 14$, NS

A t-test for dependent samples was performed to calculate the observed value of t to determine whether there was a significant difference between the pretest and posttest mean teacher attitude scores. The value of t was not significant, therefore, the null hypothesis was accepted.

Discussion of the Results

The semantic differential was designed to elicit positive or negative responses from the subjects questioned to determine their attitudes toward portfolio use. The results from the pretest and the posttest were then compared to determine whether or not there was a statistical difference between them.

Some of the research suggested that teachers who implemented portfolios were pleased with the results and considered them effective assessment tools (McKnight, 1994; Bergeron, 1994; Adams & Drobnak 1994). This would indicate that if teachers were open to alternative methods of assessment, they would be expected to have positive attitudes toward the use of portfolios in the classroom. After implementation, the teachers' attitudes would be reinforced because they would have first-hand knowledge of the advantages of portfolios over conventional assessment.

However, research conducted by Tierney, Carter, and Desai (1991), Seeley (1994), and Routman (1991) pointed out many disadvantages in portfolio use particularly if teachers were not trained in their design and use and were not totally committed to the concept. The strength of the arguments of Routman (1991), Adams and Drobnak (1994), and Clemmons, Laase, Cooper, Areglado, and Dill (1993) delineating the

disadvantages and problems with portfolio use caused the researcher to conclude that there would not be any statistical difference between teacher attitudes toward portfolios before and after their implementation. The results of this research indicated that the teachers surveyed had positive responses, means scores of above 60, on both the pretest and the posttest. There was not a statistical difference between the two mean attitude scores, therefore, the results called for an acceptance of the null hypothesis.

As the researcher stated in Chapter 1, there were some limitations to this research which she felt affected the outcome. The small number of respondents (n=15) impacted the calculations by creating a clustering of the scores. This clustering was also influenced by the fact that the majority of the teachers surveyed taught language arts and were assumed to be predisposed toward the use of portfolios. On both the pretest and the posttest there were low scores of 20 and high scores of 90 or above which skewed the calculations. However, the researcher did not feel these scores could be discarded because of the small sample size.

A strong factor influencing the results of the study was, as the researcher expected, the fact that the teachers were not trained in portfolio use nor mandated to use them. Negative responses on the

posttest could have been a result of teachers using the portfolios inappropriately or not using them at all. The teacher who scored 20 on both tests admitted that she did not like portfolios and did not use them because she felt that portfolios were not germane to her subject area which is mathematics.

The language arts teachers on the whole registered more positive responses on the pretest than on the posttest. They admittedly were optimistic about using portfolios but putting them into practice was more difficult and time-consuming than they had anticipated. Using portfolios as assessment tools required more discipline and organization of time, particularly when time had to be allotted for conferencing. They did not feel that had this time to give. This problem echoed Routman (1991) in one of her criticisms regarding lack of training for teachers prior to implementation of portfolios.

The limited time period of the study, three months, also affected the responses of the teachers as had been expected. Three months did not allow enough time to solve problems with portfolio implementation nor was there enough time to change teacher perceptions or expectations about portfolios. Individual teacher scores were almost identical for both tests. Therefore, there was no significant change in attitude recorded.

In summary, although the researcher concluded that the teachers surveyed reported positive attitudes toward the use of portfolios in the classroom, there was no significant difference in teacher attitude scores before and after portfolio implementation in the classroom. The researcher believes that the minor decrease in the mean scores were impacted by the limitations, lack of teacher training before the implementation of portfolios, the fact that portfolio use was not mandated, and the limited time of the study.

CHAPTER V

SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

Summary

Within the context of contemporary education alternative methods of assessment are being sought as conventional methods seem to focus solely on achievement and do not address process, progress, or student involvement. Those with a more holistic philosophy toward education feel that portfolio assessment which is more closely linked to an evaluation of the student as a learner and participant with the teacher in the learning process provides that alternative assessment method. Even with the popularity of portfolios some problems have developed with lack of training of teachers, time constraints on the teachers, and questions of accountability so teachers' attitudes toward portfolio implementation and use seem to be mixed.

The purpose of this study was to compare and contrast elementary school teachers' attitudes toward portfolio use in the classroom before and after portfolio implementation with each student.

The hypothesis stated that there would be no significant difference in the mean pretest and posttest attitude scores of elementary teachers toward portfolio

use before and after implementation of a portfolio for each student.

To perform this research a semantic differential was administered to fifteen elementary teachers in a small, parochial school in a suburban setting. A pretest was given to each teacher prior to the institution of using a portfolio for each student in his/her classroom. To respond to the pretest the teachers were asked to rate twenty bipolar adjectives on a five point scale choosing the adjective which most closely described their feelings toward portfolio use. After the pretest the teachers were asked to institute the use of portfolios in their classrooms. After three months of using portfolios the teachers were given the same semantic differential as a posttest.

The mean attitude scores for the pretest and posttest were calculated and compared. There was no statistical significant difference between the two test scores, therefore, the null hypothesis was accepted.

Conclusions

The research in this study reinforced the concept that portfolios as assessment tools have advantages over conventional tests because they can address the student more holistically. Portfolios demonstrate not only achievement but process, progress, and effort by the inclusion of representative work samples over time.

Through portfolio use students and teachers work together in the process of self-evaluation and goal-setting helping the student to become more involved in the learning process. Student-teacher conferencing and shared decision-making enables the teacher to become more aware of the student as an individual. Portfolios are an aid in parent-teacher conferences because they provide concrete evidence to the parents pertinent to the effort and progress of their child.

Although the use of portfolios has many advantages, both the research and the study demonstrated that there are some disadvantages with portfolio use. The assessment process with portfolio use is time-consuming because it requires time away from classroom teaching for individual conferencing to evaluate work samples, to set goals, and to document student progress. Teachers have difficulty setting aside the time required for this during the school day. It is also difficult to commit this time for the entire school year which is necessary if the portfolio is to be an on-going assessment tool. As well as the time commitment, teachers must commit to the concept by giving up control of their classrooms by letting the student take responsibility for his/her learning.

The lack of training available to teachers prior to the institution of portfolio use has become more apparent as school districts are mandating portfolio use. Teachers, as the study points out, who were initially optimistic about portfolio use do not embrace the concept with the enthusiasm required for its success because they don't know where or how to begin. The teachers in the study had no significant change in their attitude scores during the three months between the pretest and posttest which the researcher believes is due to a combination of lack of training and the limited time period of the study.

Recommendations

Based on the research and the results of the study if teachers are to have positive responses toward the initial use of portfolios, and if they are to maintain positive attitudes after implementation, some affirmative action must be taken prior to portfolio use. Teachers should receive instruction and supervision during initial stages of portfolio use. They need training on how to design a portfolio and assistance in deciding upon a purpose for the portfolios in their classrooms. In order for portfolio use to be successful, teachers should be trained in conferencing and goal-setting.

To use portfolios to their fullest, teachers need to learn how to choose materials to be included in the portfolio and how to make changes. They also need to learn how to involve the student in all learning decisions so that he can begin to set his own goals. It is difficult to change direction from teacher-directed education to student-directed, but that is what the teacher must learn to do in order for portfolio assessment to be successful for both the teacher and student.

Portfolios can be authentic, meaningful, assessment tools. They can provide the teacher with a total picture of the child as student and learner. Portfolios enable the teacher to see not only where the student is, but where he has been, and where he is going. Through portfolios teachers can evaluate themselves, the students, and the learning process. No conventional form of testing is able to do all that a portfolio can. It is clear that as methods of assessment portfolios are here to stay. Teachers need to learn to use them appropriately to maximize them to their fullest potential.

APPENDICES

Appendix A
Portfolio Survey

This is a questionnaire designed to give you an opportunity to share your feelings about portfolios. Please notice that there are twenty adjective pairs listed below with two adjectives on each line and five spaces between them. Please put a check on the line closest to the adjective on each line which best describes how you feel about using portfolios in your classroom. After you completed the survey, please return it to me.

Thank you for your cooperation.

pessimistic	_____	_____	_____	_____	_____	optimistic
good	_____	_____	_____	_____	_____	bad
warranted	_____	_____	_____	_____	_____	unwarranted
approving	_____	_____	_____	_____	_____	disproving
beneficial	_____	_____	_____	_____	_____	harmful
uncomfortable	_____	_____	_____	_____	_____	comfortable
pleasurable	_____	_____	_____	_____	_____	painful
clear	_____	_____	_____	_____	_____	confusing
successful	_____	_____	_____	_____	_____	unsuccessful
heavy	_____	_____	_____	_____	_____	light
eager	_____	_____	_____	_____	_____	indifferent
believing	_____	_____	_____	_____	_____	skeptical
elevated	_____	_____	_____	_____	_____	depressed

complete	_____	_____	_____	_____	_____	incomplete
pursuing	_____	_____	_____	_____	_____	avoiding
stable	_____	_____	_____	_____	_____	changeable
reputable	_____	_____	_____	_____	_____	disreputable
positive	_____	_____	_____	_____	_____	negative
cruel	_____	_____	_____	_____	_____	kind
willing	_____	_____	_____	_____	_____	Unwilling

Appendix B
Portfolio Survey

This is a questionnaire designed to give you an opportunity to share your feelings about portfolios. Please notice that there are twenty adjective pairs listed below with two adjectives on each line and five spaces between them. Please put a check on the line closest to the adjective on each line which best describes how you feel about using portfolios in your classroom. After you completed the survey, please return it to me.

Thank you for your cooperation.

pessimistic	_____	_____	_____	_____	_____	optimistic
good	_____	_____	_____	_____	_____	bad
timely	_____	_____	_____	_____	_____	untimely
disproving	_____	_____	_____	_____	_____	approving
beneficial	_____	_____	_____	_____	_____	harmful
uncomfortable	_____	_____	_____	_____	_____	comfortable
pleasurable	_____	_____	_____	_____	_____	painful
obscure	_____	_____	_____	_____	_____	lucid
successful	_____	_____	_____	_____	_____	unsuccessful
meaningful	_____	_____	_____	_____	_____	meaningless
hopeless	_____	_____	_____	_____	_____	hopeful
believing	_____	_____	_____	_____	_____	skeptical
depresses	_____	_____	_____	_____	_____	elevated

complete	_____	_____	_____	_____	incomplete
avoiding	_____	_____	_____	_____	pursuing
voluntary	_____	_____	_____	_____	involuntary
reputable	_____	_____	_____	_____	disreputable
negative	_____	_____	_____	_____	positive
low	_____	_____	_____	_____	high
willing	_____	_____	_____	_____	Unwilling

Appendix C
Portfolio Survey

This is a questionnaire designed to give you an opportunity to share your feelings about portfolios. Please notice that there are twenty adjective pairs listed below with two adjectives on each line and five spaces between them. Please put a check on the line closest to the adjective on each line which best describes how you feel about using portfolios in your classroom. After you completed the survey, please return it to me.

Thank you for your cooperation.

pessimistic	__ 1 __	__ 2 __	__ 3 __	__ 4 __	__ 5 __	optomistic
good	__ 5 __	__ 4 __	__ 3 __	__ 2 __	__ 1 __	bad
timely	__ 5 __	__ 4 __	__ 3 __	__ 2 __	__ 1 __	untimely
disproving	__ 1 __	__ 2 __	__ 3 __	__ 4 __	__ 5 __	approving
beneficial	__ 5 __	__ 4 __	__ 3 __	__ 2 __	__ 1 __	harmful
uncomfortable	__ 1 __	__ 2 __	__ 3 __	__ 4 __	__ 5 __	comfortable
pleasurable	__ 5 __	__ 4 __	__ 3 __	__ 2 __	__ 1 __	painful
obscure	__ 1 __	__ 2 __	__ 3 __	__ 4 __	__ 5 __	lucid
successful	__ 5 __	__ 4 __	__ 3 __	__ 2 __	__ 1 __	unsuccessful
meaningful	__ 5 __	__ 4 __	__ 3 __	__ 2 __	__ 1 __	meaningless
hopeless	__ 1 __	__ 2 __	__ 3 __	__ 4 __	__ 5 __	hopeful
believing	__ 5 __	__ 4 __	__ 3 __	__ 2 __	__ 1 __	skeptical
depressed	__ 1 __	__ 2 __	__ 3 __	__ 4 __	__ 5 __	elevated

complete	__5__	__4__	__3__	__2__	__1__	incomplete
avoiding	__1__	__2__	__3__	__4__	__5__	pursuing
voluntary	__5__	__4__	__3__	__2__	__1__	involuntary
reputable	__5__	__4__	__3__	__2__	__1__	disreputable
negative	__1__	__2__	__3__	__4__	__5__	positive
low	__1__	__2__	__3__	__4__	__5__	high
willing	__5__	__4__	__3__	__2__	__1__	unwilling

APPENDIX D

TEACHER TEST SCORES AND DEVIATION FROM MEAN

Subject	Pretest	d	Posttest	d
A	94	25	83	16
B	81	12	74	7
C	79	10	73	6
D	65	- 4	90	23
E	57	-12	52	-15
F	72	3	62	- 5
G	79	10	74	7
H	62	- 7	77	10
I	79	10	76	9
J	20	-49	20	-47
K	83	14	70	3
L	76	7	75	8
M	69	0	62	- 5
N	56	13	51	-16
O	63	- 6	68	1

Mean	69	67
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Standard deviation	-	0.32
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Critical value of t		2.145
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(Issac & Michael 1981)

REFERENCES

Adams, D. (1991, November). Writing portfolios: a powerful assessment and conversation tool. Writing Teacher, 12-14.

Adams, D. & Drobnak, M. (1994, May). Portfolio assessment. Writing Teacher, 10-14.

Ary, D., Jacobs, L., & Razavieh, A. (1985). Introduction to research in education (3rd ed.). New York, NY: Holt, Rinehart, and Winston.

Bergeron, B. (1994, May). Spelling out success with portfolios. Writing Teacher, 20-22.

Clemmons, J., Lease, L., Cooper, D., Areglado, N., & Dill, M. (1993). Portfolios in the classroom. New York, NY: Scholastic Publications.

Farnan, N. & Fearn, L. (1994, May). The writing program in action. Writing Teacher, 26-31.

Farr, R. (1992, September). Putting it all together: solving the reading assessment puzzle. The Reading Teacher, 46(1), 26-37.

Fowler, F.J., Jr. (1988). Survey research methods. Newbury Park, CA: Sage Publications, Inc.

Gay, L.R. (1987). Educational research (3rd ed.). Columbus, OH: Merrill Publishing Co.

Graves, D.H. & Sunstein, B.S. (1992). Portfolio portraits. Portsmouth, N.H.: Heinman.

- Herman, J. & Winters, L. (1994, October). Portfolio research: slim collection. Educational Leadership, 52, 48-55.
- Howard, K. (1994, May). Portfolio culture in Pittsburg. Writing Teacher, 15-19.
- Issac, S. & Michael, W.B. (1981). Handbook in research and evaluation (2nd ed.). San Diego, CA: EdITS publishers.
- Johnston, P. (1992, September). Assessment. The Reading Teacher, 46(1), 60-62.
- McKnight, K. (1994, May). Everything including the kitchen sink. Writing Teacher, 35-37.
- Osteen, E.C. (1994, May). Authorship with authority. Writing Teacher, 32-34.
- Routman, R. (1991). Invitations. Portsmouth, NH: Heinmann.
- Schurr, S. (1992). The ABC's of evaluation. Columbus, OH: National Middle School Association.
- Seeley, M. (1994, October). The mismatch between assessment and grading. Educational Leadership, 52, 4-6.
- Shirley, J.M. (1994). Pursuing the dream: a plan. Writing Teacher, 28-31.
- Tierney, R., Carter, M.A., Desai, L.E. (1991). Portfolio assessment in the reading-writing classroom. Norwood, MA: Christopher-Gordon Publishers, Inc.